



SIQUAL 5919 Steel

Designation by Standards

Brand Name	Ravne	Mat. No.	DIN	EN	AISI/SAE
SIQUAL 5919	ECN150	1.5919	15CrNi6	-	3115

Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
0.16	0.28	0.50	1.55	-	1.55	-	-	-

Description

Alloyed carbon steel.

Applications

Cutting tools, stamping, woodworking, drawing, deep drawing and pressing tools, cold working rolls, measuring tools.

Physical properties (average values) at ambient temperature

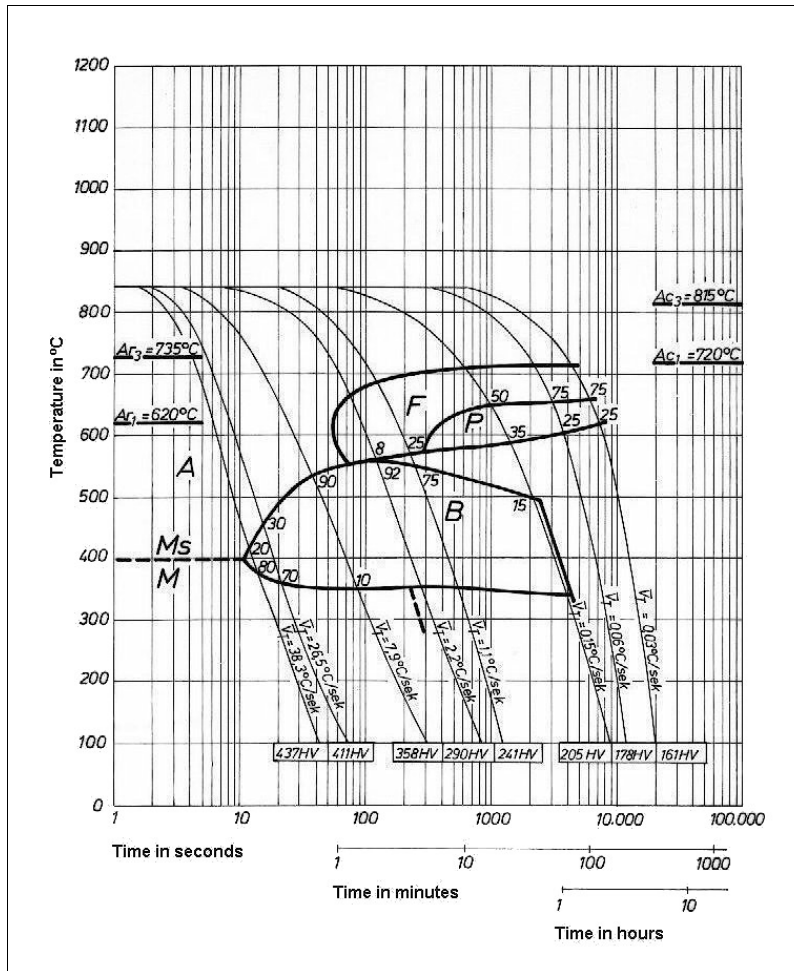
Modulus of elasticity [$10^3 \times \text{N/mm}^2$]: 210

Density [g/cm^3]: 7.83

Coefficient of Linear Thermal Expansion $10^{-6} \text{ }^\circ\text{C}^{-1}$

20-100°C	20-200°C	20-300°C	20-400°C	20-500°C
11.1	12.1	12.9	13.5	14.1

Continuous Cooling Transformation (CCT) Diagram



Soft Annealing

Heat to $650\text{--}700^{\circ}\text{C}$, cool slowly. This will produce a maximum Brinell hardness of 217.

Normalizing

Temperature: $850\text{--}880^{\circ}\text{C}$.

Intermediate Annealing

Temperature: $630\text{--}650^{\circ}\text{C}$.

Carburizing

Temperature: $850\text{--}980^{\circ}\text{C}$. Cooling from carburizing temperature: oil, water, thermal bathm, salt bath.

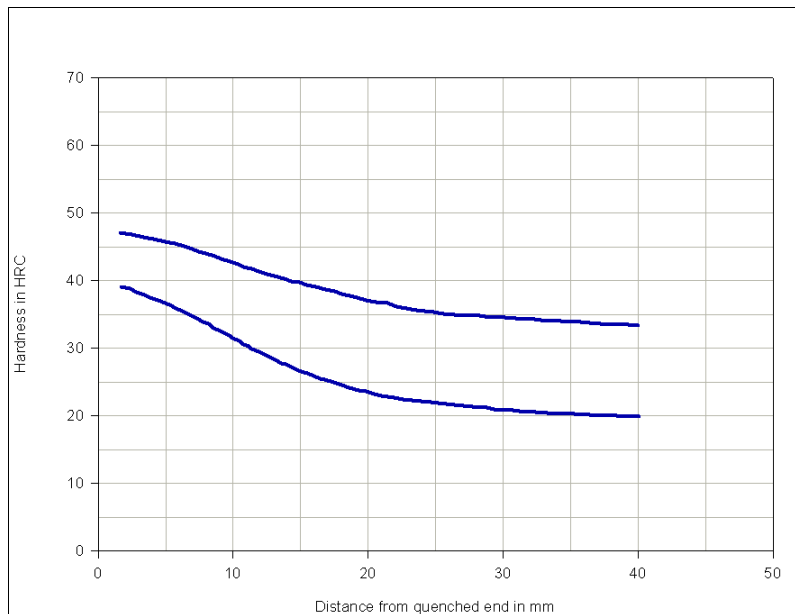
Hardening

Core hardening: $830\text{--}870^{\circ}\text{C}$. Surface hardening: $780\text{--}820^{\circ}\text{C}$. Quenching media: oil, water, therma; bath.

Tempering

Tempering temperature: $150\text{--}200^{\circ}\text{C}$.

Hardenability Diagram



Forging

Hot forming temperature: 1100-850°C.

Machinability

No data.

Forms manufactured: Please see the [Dimensional Sales Program](#).

Disclaimer

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